

Inner Forth Habitat Network Webinar

Thursday 3 February 2022, 15:00 – 17:00

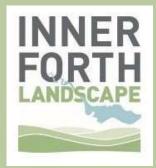
In early 2019, the Inner Forth Futures partnership piloted an approach to developing a regional scale habitat network. This webinar will share learning from development and use of this network with planners and policy makers considering the future implementation of habitat networks.

By describing the Inner Forth Habitat Network tools created, the aim is to support practitioners in translating national policy on nature networks into local plans and making development management decisions that optimise the benefits for nature.

Further information about the Inner Forth Habitat Network: <u>https://www.innerforthlandscape.co.uk/about/habitat-network-project</u>



Inner Forth Habitat Network Webinar



Welcome & Introduction

Zoe Clelland

@innerforth

Inner Forth Futures Steering Group Chair





Joining up nature across central Scotland



Agenda



Creation of the IF Habitat Network maps and tools

Kate Fuller, Project Manager, Inner Forth Futures

The Fit with National Policy

Emilie Wadsworth, Director of Development, Green Action Trust

Break

Use of the network tools:

- Anna Perks Falkirk Council Urban Opportunities
- Natalie Stevenson Buglife Nature Networks and B-Lines
- Toby Wilson RSPB The Inner Forth Wetland Network

FUTURESCAPES

space for nature, land for life

Inner Forth

CREATING AN AMAZING PLACE FOR PEOPLE AND WILDLIFE

Intertidal habitate such as saltmarsh and mudflate support a fantastic wealth of wildlide and deliver important benefits for people living and working near seas and estuaries. Sadly, these habitate havo been lost in Scotland over the years, mainly through reclamation for farming and development.

The Firth of Forth's intertidal habitats provide vital food for internationally important tumbers of wintering willfowl and wading birds. At the heart of Central Scotland, this area has a long history of industrial and agricultural use that has resulted in loss of vahabile hubitat over centuries. With new pressures from development, climate change and disturbance to the birds using the Forth, there is a need for action on a large scale to protect this rich natural heritage and to make the most of exciling opportunities for sustainable flood management and climate change mitigation.

Dur vision is for large-scale habitat creation across 2,000 hectares around the Fakirik and Alloa ana, centred on our Skinflats nature reserve. By creating a network of new wetland habitat, including autmursh, mudfat as de readbed, we will deliver homes and food for wildfife and help to achieve a wide range of other benefits for people living around the Firth. We will work in partnership with focal authorities and land managers to make the most of opportunities for autainable flood management, recreation and education in an area within easy reach of the majority of Scotland's population.

OUR WORK SC

The Inner Forth's history of agricultural and industrial use means there are now reclaimed and brownlield areas with potential for habitat restoration. However, the number of situs is limited by other uses, and it suitable places for wildlls are not safeguarded, they could become lost to development or other competing demands. We have started the lob of

identifying these states the port of particularly exciting opportunity to create a network of new habitats around the Falkirk and Alloa area.

The first stage of this potential network is already underway at RSPB Skinflats nature reserve. Here, a habitat creation project has transformed farmland behind an old as wall into a new wetfland that is providing a rootting and feeding area for spectacular estuary birds like shelducks and curlews, and a new metting area for lapwings. Skinflats is an exciting first stage in this wider project, and is already providing inspiration for almilar projects slawshere on the Forth.

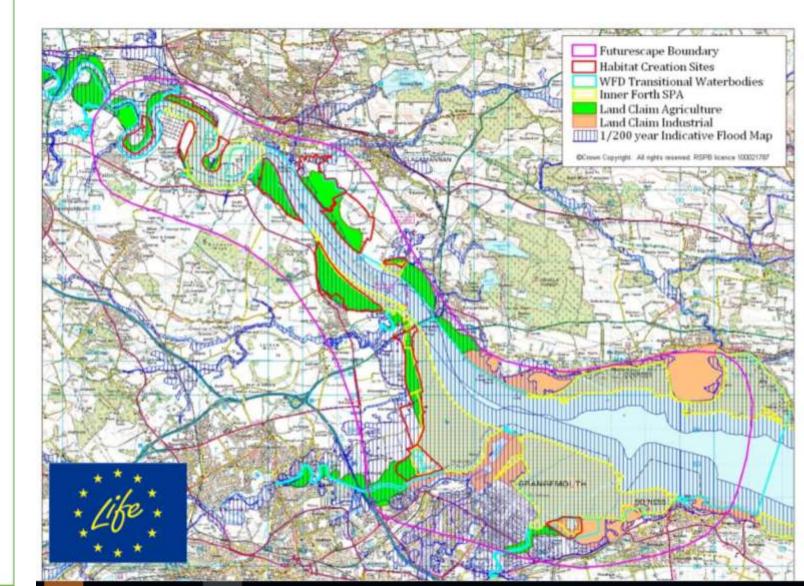


MUDFLATS: BIRD REFUELLING STATIONS

Mudflats may not look rich in wildlife, but dig down and you'll find that they provide a rich source of food such as worms and shellfish that are incredibly important for wildfowl and wading binds. When the mudflats are exposed at low tide. they come to life, particularly during the winter months when the Forth becomes a home for thousands of birde including redshanks, knots, durilins and oystercatchers that spend the summer elsewhere in Scotland or perhaps even loeland, Scandinavia or the Arctic. For birds heading to estuaries further south, the Forth is a vital re-fuelling stop. acting like a motorway service station on the long journey!

> When the tide comes in, these birds read to roost on higher ground. Without sale and undistarbed places to reat before their next meal, they waste valuable emergy moving around and cannot take full edvantage of the food available.

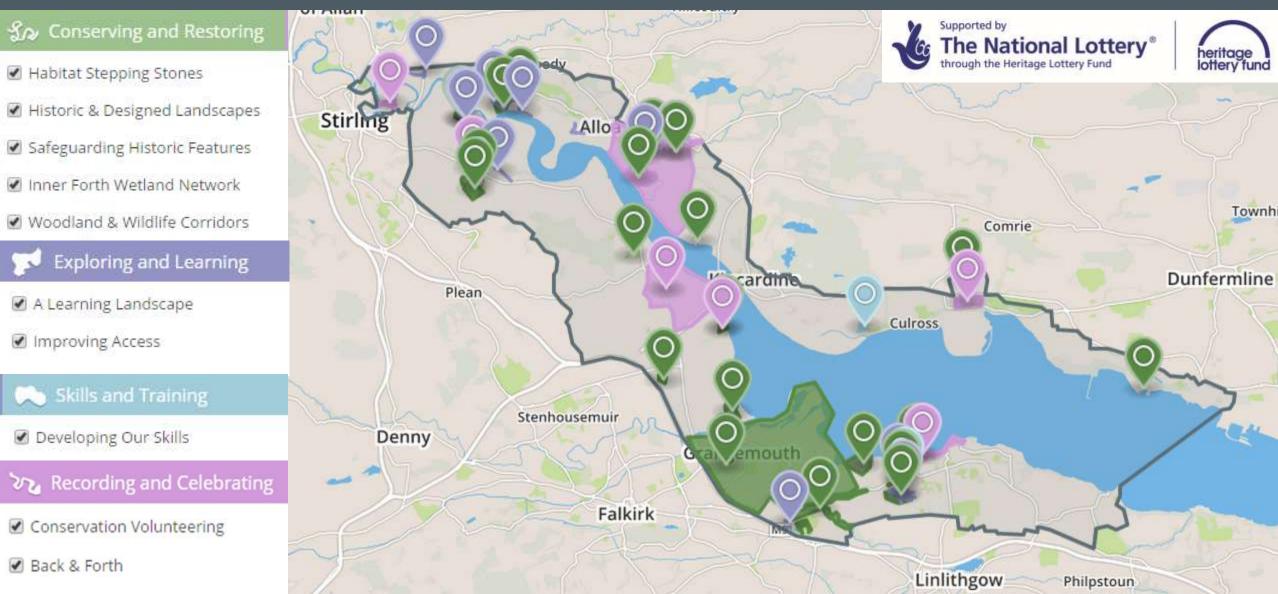








Inner Forth Landscape Initiative



Why produce an Inner Forth Habitat Network?



EcoCo LIFE

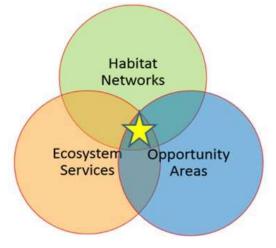
- A project requirement to produce an Ecological Coherence Protocol

A tool to inform decisions and focus work in the area

-To maximise value of limited resources and target effort of the partnership and others, including through planning decisions

An opportunity to pilot how a Nature Network could work at a regional scale and contribute to the CSGN

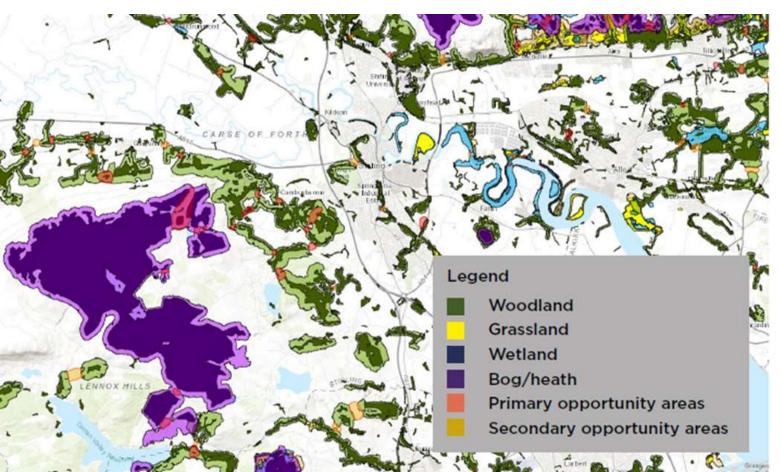
-Use existing partnership to demonstrate the value and potential for scaling up





Complimentary initiatives:

- Buglife B-lines
- CSGN Habitat Connectivity Map







Joining up nature across central Scotland

Creation of the Inner Forth Habitat Network

Ecological coherence, stakeholder collaboration & tools for users

Kate Fuller, Inner Forth Futures Project Manager

<u>www.innerforthlandscape.co.uk</u>

INNER







Collaborative working & stakeholder engagement 2012-21

Climate FORTH (Furthering Our Resilience Through Heritage)

A new project from the Inner Forth Futures partnership



Conference

ROUTE 1 THE FIRST FORTH BRIDGES

Spanning the Forth salley at the historic first bridging point of Stirling, this walking circuit would also suit a cycle journey. However the Gille's Hill section is a little rough in places, so if you're on a trike you may need to get off and wolk occasionally

This culturally rich raute connects the site of the Battle of Banoscidum, Sintry Castle, Styling Old Bridge, the Wallace Monument and Cambuskenneth Abbey. On the way you'll cross the Forth and some of its tributaries, climb through ancient woodland at Oilhes Hill, and wander in a Site of Special Scientific Interest. (SSSI) at Abbey Craig.

The route starts and finishes at Stirling Railway Station, where the Stirling Active Travel Hub provides e-bike rental far Stirling residents, and Newtlake sycles and Farth Bike e-lakes are also gemlable to hire.

Inner Parity Futures (IFF) is a partnership organisation that is taking forward the legacy of the lower Forth Landscape Initiative. Find out mane at lanena inmarrherth Landanages da på

Wanderings and Windings (WEN) is an IFF project, supported by the Haltonal Lathery Heritage Fund. The taphet is just one of time Wanderinge and Windlegs routes around the inner Forth - Bay-long soulds and option highlighting and linking status of the fastastic wildlife and historic haritage of this unique landscare at the heart of fundland. Visit our WEW case at of the Thior document on the Jales of Associate Strate Solutions in download all the leaflets and for further information on each of the mutate.

If you would like to share your photos and experiences of the routes, why net just the Manderings and Windings Escebook Group, where you can upliced them for others. You can also angegs with up on Twitter Generitsth

A GPX file can be downloaded here and sent to a GPS. device or to a latertatione

Tex can also navigate the route by using Ordnance. Survey Landranger 57 String & The Tressachs Max

Look out for the Wanderings & Windings way trackers. located of key points and junctions to help gade you, and anardisad our free 'inner Ferth Landscope Explorer' apa for additional information as you navigate the route.

HERITAGE

INNER

FORTH

Wanderings & Windings Heritage Trails





pandemic, we know from its history that the Inner Forth has a great capacity to adapt to change. We see that natural and built heritage can be the asset on which to build a sustainable, healthy, green recovery for the area. Working in new ways and in new collaborations with the communities and partners who are at the

To show how a new future can be built for this place and its people. Despite being dramatically shaped by

its industrial past, facing the threat of a changing climate and suffering from the impacts of the Covid

forefront of dealing with these challenges, our partnership will find new ways to help this place adapt to change; by building community wealth and increasing their resilience; by investing in innovative uses of existing heritage to provide solutions to inequality, wellbeing and economic challenges. We will ensure that adapting to change is part of a just transition.



Climate FORTH (Furthering Our Resilience Through Heritage)

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INNER

FORTH

Vision

How would you make natural and historic heritage more resilient in your area?

Add your voice and help inner Forth Fatores to identify a longilat of sites, structures. places or spaces around 92rling, Clackmannamshire, Califick and Fife that could be made more resilient to climate and other charge if they were part of a new project. called Climate FORTH: Furthering Realizing Through Heritage

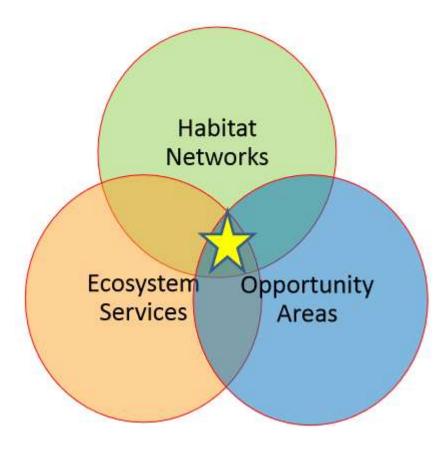
Phone and in the map by physiology the matural and history, sites, siterhaves, places or spaces that are important to you, telling valthe issues that are faced and what changes could be made to make these locations cale, secure, invest and used for the fuctures. We seemake like he bear result fabries and converting

Winey man and commen Learn more about the project



The Rationale for a Model Approach





- To be clear about which areas to protect.
- To maximise ecological benefits.
- To look for win-wins for people.
- An agreed network ambition could help to:
 - Target resources
 - Help funders focus on the priorities
 - Influence agri-environment and Land Use Plans
 - Direct mitigation and planning gain
- A collective voice is more convincing (collaboration).

Collaboration for Success





- Buglife Scotland
- Clackmannanshire Council
- CSGNT
- Falkirk Council
- Fife Council
- Forestry Commission Scotland

- Forth Rivers Trust
- Froglife
- Plantlife
- NatureScot
- RSPB Scotland
- Scottish Wildlife Trust

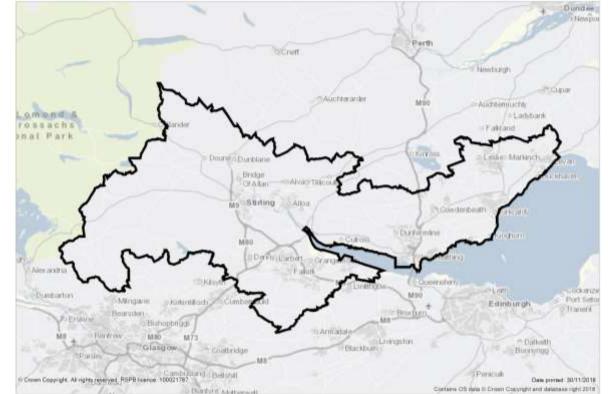
- Scottish Wildlife Trust
- SEPA
- Stirling Council
- The Wildlife Information Centre
- The Woodland Trust
- Local recorders

An area based review of the Protocol

1. Consideration of specific habitat types.



- 2. Develop a habitat network & action plan:
 - A collective vision for habitat enhancement
 - A call to action to deliver this
- 3. Produce a refined protocol & practitioners guide.



Habitat Networks

Opportunity

Areas

Ecosystem

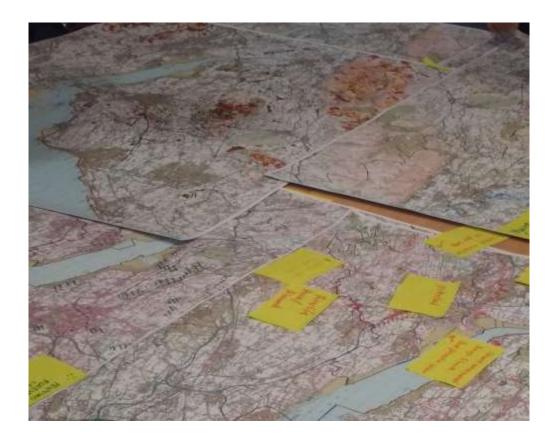
Services

Inner Forth Habitat Ambitions

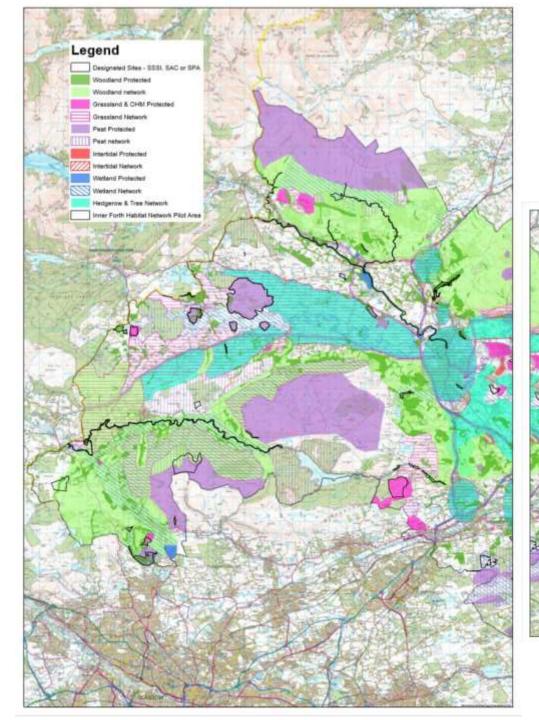
To agree and map our ambitions for habitat conservation and habitat network development for the Pilot area.

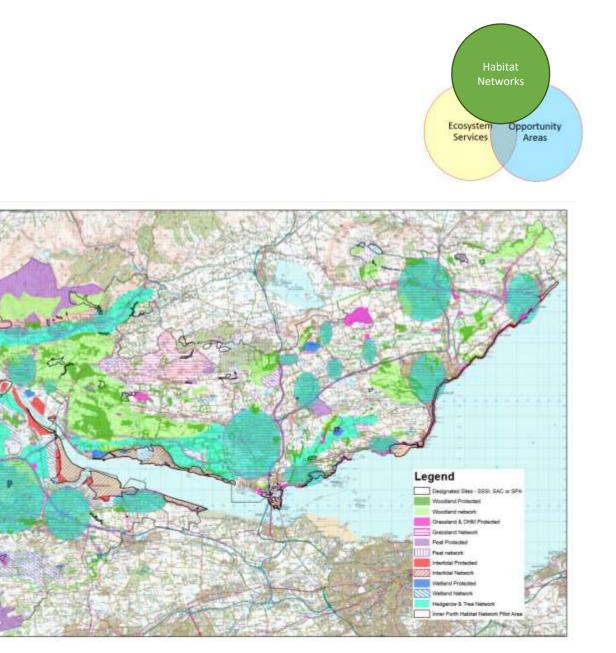
- Review existing data, discuss & propose.
- Where are the important areas that should be protected?
- Where are the opportunities for new habitat and/or habitat network development?











Inner Forth & Ecosystem Services

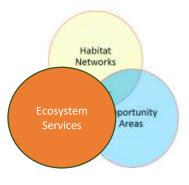
To sense-check our mapped ambitions for habitat conservation or management and habitat network development for the Pilot area.

- Flood Risk
- Air Quality
- Scottish Index of Multiple Deprivation
- Land Capability for Agriculture

How do these inform our existing mapped network?

What does leaving areas 'blank' imply?





Opportunities to deliver the Network

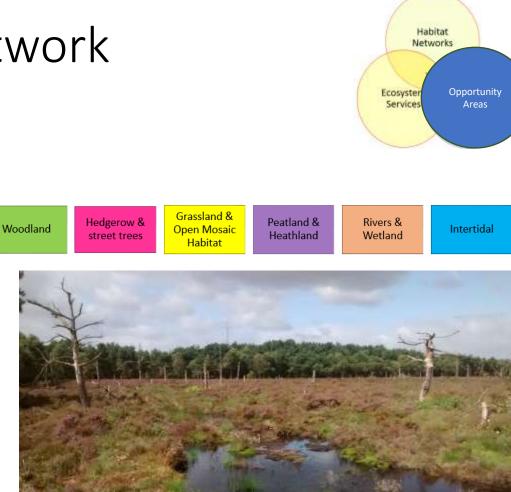
To identify opportunities to deliver the network.

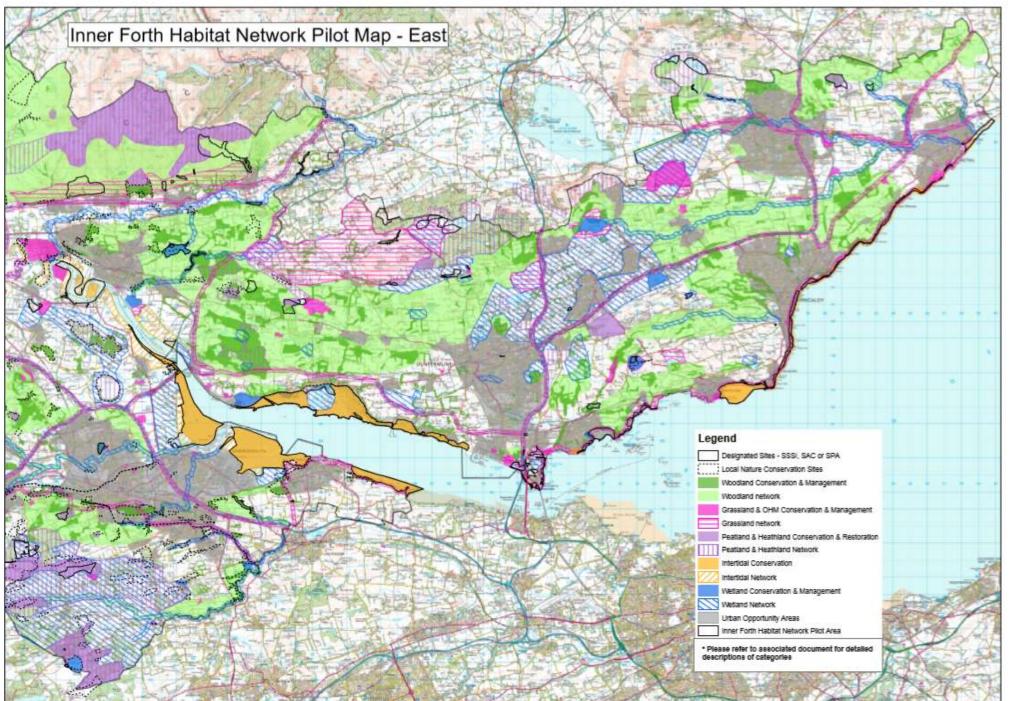
- Quick wins & Blue-sky thinking?
- What & Where?
- Barriers to realisation?

To identify potential next steps to realising network delivery.

• What level are actions? strategic, organisational, project or site.

What next for the pilot stakeholder group?



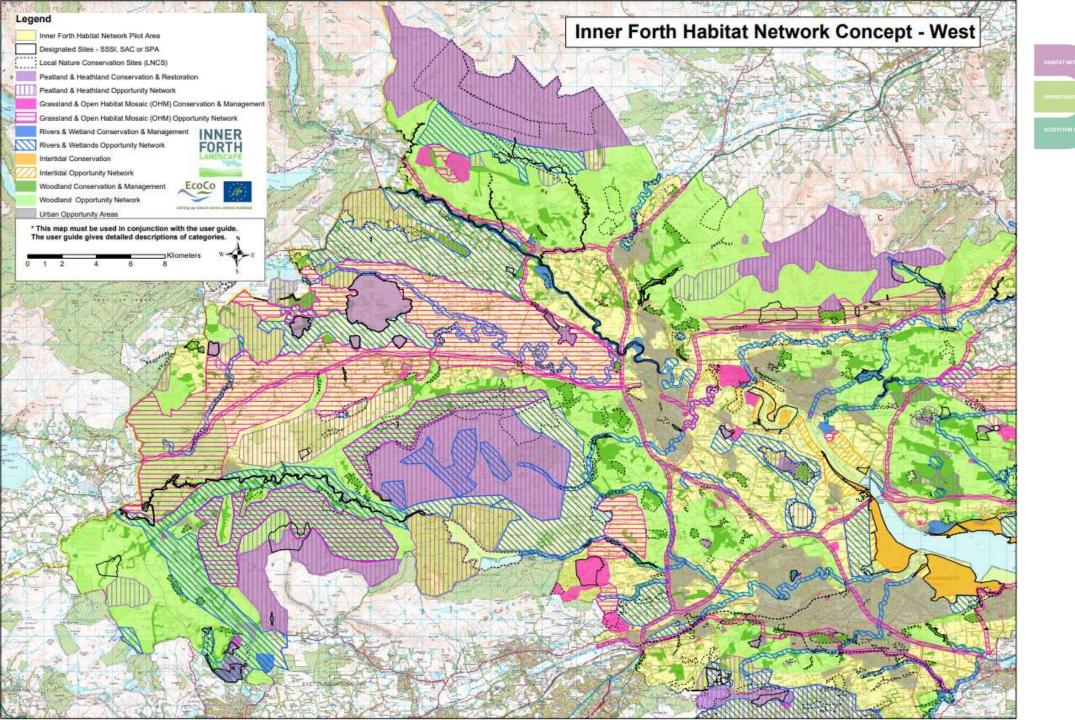




The Inner Forth Pilot has identified the best places to deliver for habitats, ecosystem services and people.

The collaborative process has refined the Protocol.

Project outputs were made available on the EcoCo and IFF websites.



www.innerforthlandscape.co.uk/about/habitat-J network-proje

THE BEST PLACES TO WORK FOR PEOPLE AND NATURE

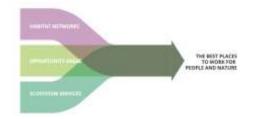
Inner Forth Key Habitat Action Plans

River & Wetland Peatland & Heathland Intertidal Grassland & Open Mosaic Habitat Urban Woodland

We all have a role to play in tackling the biodiversity and climate crisis, whether in rural or urban Scotland, and whether working at the field, garden, farm, development, city or landscape-scale. Promoting opportunities to deliver the National Ecological Network at a local or regional scale, such as within the Inner Forth, will empower land managers, decision makers, organisations and businesses to take effective action.

Why a call to action?

- Projects & funders
- Planning
- Land Use

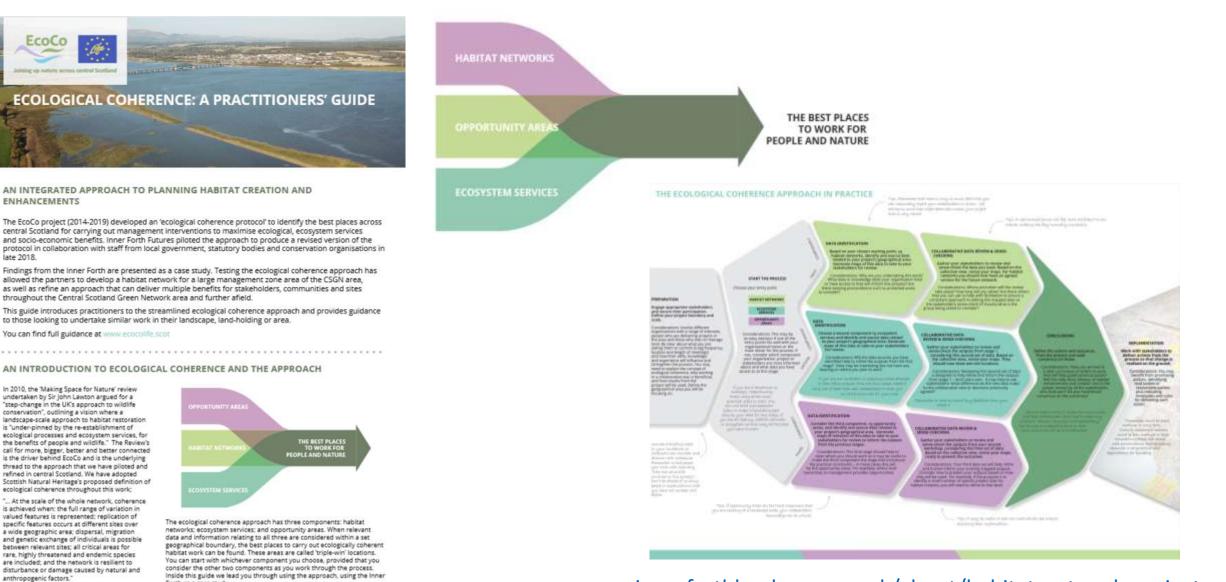


Inner Forth Key Habitat Action Plan ⁶		Intertidal						
Objective: Conservation of existing habitat to benefit people and nature	Pla	ices i	where	the conservation of existing intertidal habitat	is the priority for the coherence of the habitat network.			
Action		Barriers to action						
Ensure no net loss of habitat as a result of development.	-	Y		All areas	Requires up front delivery of mitigation or compensation habitat and full consideration of cumulative impacts during HRA processes.			
Ensure water management infrastructure, eg sluices, is functioning to support habitat.	Y	N	N	Black Devon Wetlands (C) Kinneil Lagoons (F) Skinflats Pools (F)	Lack of resources including skilled staff time.			
Plan signage, screening, viewing structures and interpretation to encourage people to enjoy the wildlife responsibly, without disturbing birds using the habitat.	Y	N	Y	 Cambus Pools (C) Skinflats Pools (F) Kinneil Lagoons (F) Valleyfield Ash Lagoons (Ff) Blackness to Bo'ness footpath (F) 	Lack of resources including skilled staff time.			
Control invasive non-native species, such as Spartina anglica, to ensure it does not spread across habitat.	Y	N	N	All areas	Lack of resources to monitor and control. Potential for spartina to reduce erosion of tidal areas.			
Manage vegetation so it does not overshadow or encroach on habitat.	Y	N	N	Kinneil Lagoons (F) Black Devon Wetlands (C) Longannet/ Valleyfield Ash Lagoons (Ff) Bothkennar lagoons (F)	Lack of resources including skilled staff time.			
Survey and ensure protection of tern colonies.	Y	Y	N	Grangemouth Docks (F)	Access permissions required.			

Ecological Coherence: A Practitioners' Guide

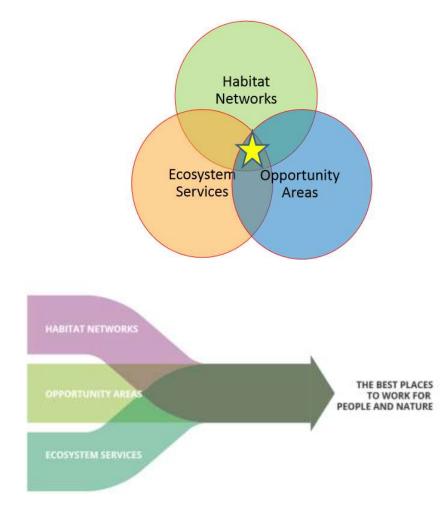
late 2018.

Forth as a case study.



www.innerforthlandscape.co.uk/about/habitat-network-project

Advocating for the Ecological Coherence Approach & delivery of the Inner Forth Habitat Network



- Mapped outputs & user guide
- A Call to Action (updated November 2021)
- Ecological Coherence A Practitioners' Guide
- Inner Forth Habitat Network webpage
- Continued collaboration through the Inner Forth Natural Heritage Working Group

Edinburgh's Thriving Green Spaces



Inner Forth Wetland Network Enhancement



Climate FORTH (Furthering Our Resilience Through Heritage)



A new future is possible for the Inner Forth

A future where our communities are not only resilient to climate change, but tackling its causes; where our natural and historic heritage is at the heart of our solutions; and where social justice and fairness shape everything we do.











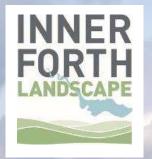




giving nature







Kate Fuller, Inner Forth Futures Project Manager

Kate.fuller@rspb.org.uk

www.innerforthlandscape.co.uk/about/habitat-network-project www.facebook.com/innerforthlandscape @innerforth

Get our app

Explore the Inner Forth with our app, celebrating the culture, history and wildlife of this unique landscape. Each location has its own fascinating chapter to tell – but visit them all to discover the full story of the Inner Forth.



















Images courtesy of:

Butterfly Conservation Scotland, Clackmannanshire Council, David Palmar (<u>www.photoscot.co.uk</u>), Falkirk Council, Fife Council, Paul Sizeland/NatureScot, RSPB Scotland & Stirling Council.



Nature Networks, NPF4 and the Central Scotland Green Network

Emilie Wadsworth, Director of Development, Green Action Trust

Inner Forth Habitat Network Seminar

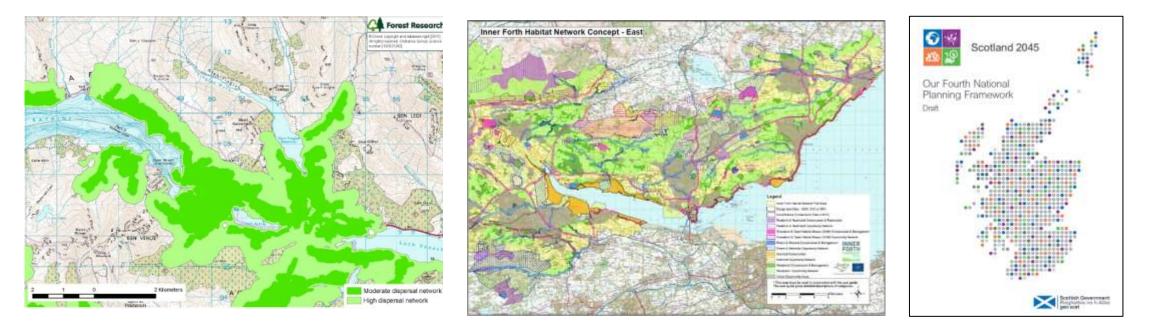
3rd February 2022





NPF4 definition:

A Nature Network is a joined-up system of places important for wild plants and animals, on land and at sea. It allows plants, animals, seeds, nutrients and water to move from place to place and enables the natural world to adapt to change, providing plants and animals with places to live, feed and breed. Effectively functioning nature networks will connect existing nature rich areas through habitat corridors, habitat 'stepping stones' or habitat restoration areas.



Central Scotland Green Network

National Development in NPF3

'By 2050, Central Scotland has been transformed into a place where the environment adds value to the economy and where people's lives are enriched by its quality'

- Quality local environments
- Natural Climate Solutions
- Network connections:
 - Wildlife
 - People
- Expressed at a range of scales through spatial and land use plans
- Delivered in partnership





DP30



Biodiversity and Ecological Coherence

Environmentally Disadvantaged Areas

Green Active Travel

Green Infrastructure

DP30 Objectives	Delivery Plan Natural Climate Solutions	Placemaking	Health and Wellbeing	Green Recovery ²
Biodiversity and ecological coherence				
HA1 Increase tree planting levels and woodland cover within the CSGN	•	•	0	0
HA2 Increase the area of restored peatland within the CSGN	•	•	0	0
HA3 Increase the area of grassland habitats within the CSGN	•	•	0	0
HA4 Increase the area of wetland and coastal habitats within the CSGN	•	•	0	0
HA5 Increase the quality/condition of habitats	•	•	0	0
HA6 Increase habitat connectivity		•	0	0

Central Scotland Green Network

Green Action Trust

Draft National Spatial Strategy in NPF4

Key activity in the theme of Central Urban Transformation:

- Accelerate urban greening
- Green infrastructure and biodiversity
- Vacant and Derelict Land
- Woodland
- Blue networks
- Bring together environmental enhancement
 projects
- Demonstrate Nature Networks at a landscape scale



Central Scotland Green Network

Draft National Development in NPF4

- Biodiversity and connectivity
- Environmental regeneration
- Vacant and Derelict Land
- Multi-functional Green Infrastructure to address the biodiversity and climate crises
- Nature Networks
- Nature Based Solutions





Planning Policy Links



Using the IFHN, or similar methodologies, can also support the implementation of the draft Planning Policies in NPF4:

- 3. Nature Crisis
- 6. Design, Quality, Place
- (7. 20 Minute Neighbourhoods)
- 12. Blue Green Infrastructure
- 13. Sustainable flood risk and water management
- (29. Urban edges)
- (30. Vacant and Derelict Land)
- (31. Rural)
- 32. Natural Places
- 33. Peat and carbon soils
- 34. Trees, woodland and forests



Thank You For Your Time

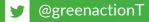




Any questions?

- **t:** 01501 822015
- a: Hillhouseridge, Shottskirk Road, Shotts, Lanarkshire ML7 4JS
- w: greenactiontrust.org





Break



After the Break

Use of the network tools:

- Anna Perks Falkirk Council Urban Opportunities
- Natalie Stevenson Buglife Nature Networks and B-Lines
- Toby Wilson RSPB The Inner Forth Wetland Network

Q&A

Anna Perks

Biodiversity Officer Falkirk Council



Habitat Network -Urban Opportunities

Built-up areas where there are a range of opportunities to enhance the ecological coherence of the habitat network and deliver benefits for people and wildlife.

Urban opportunities and green infrastructure







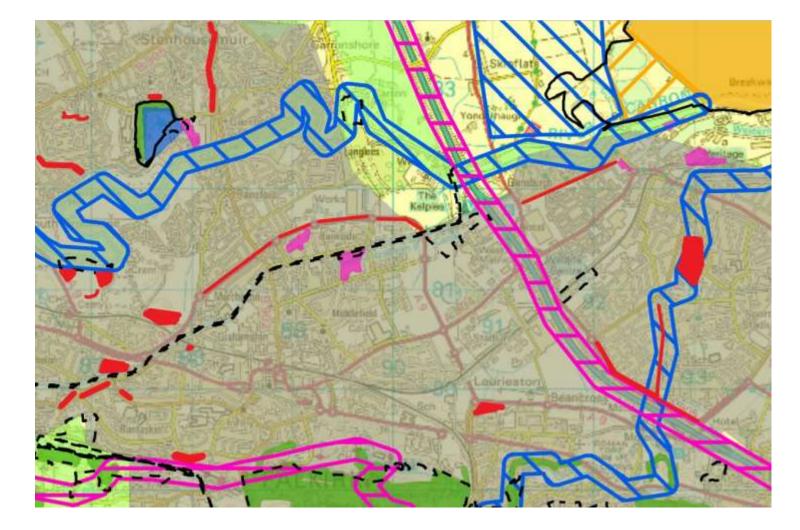






Greenspace management – a new approach





Urban greenspace enhancements:

- Improve the ecological coherence of the habitat network.
- Create a network of urban spaces for wildlife and people.
- Contribute to other habitat networks (E.g. woodland, wetland & grassland)

Habitat Network – use by planners & developers

The habitat network can help to:

- Highlight key opportunities to protect and enhance biodiversity and create nature networks in association with development.
- Identify the most beneficial and appropriate types of biodiversity enhancement for a given area or development site.
- Inform the identification and enhancement of nature networks.
- Ensure local habitat enhancements contribute to regional and national ecological networks.

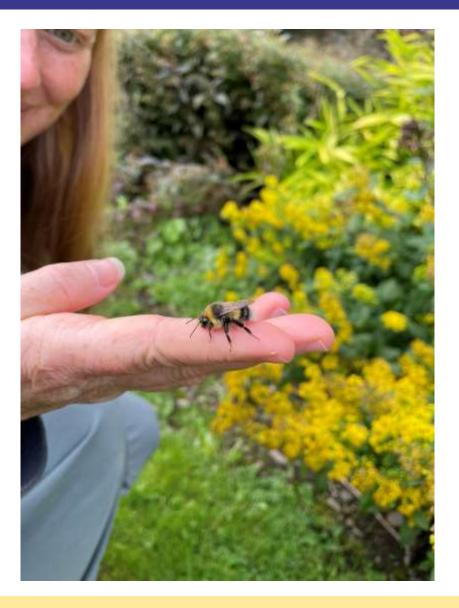


Natalie Stevenson, Scotland & NI Manager

www.buglife.org.uk

@buzz_dont_tweet





- Opportunities in the Inner Forth – Nature networks & B-Lines
- Precautionary principle

 "The right habitat in the right place" (open mosaic habitat)





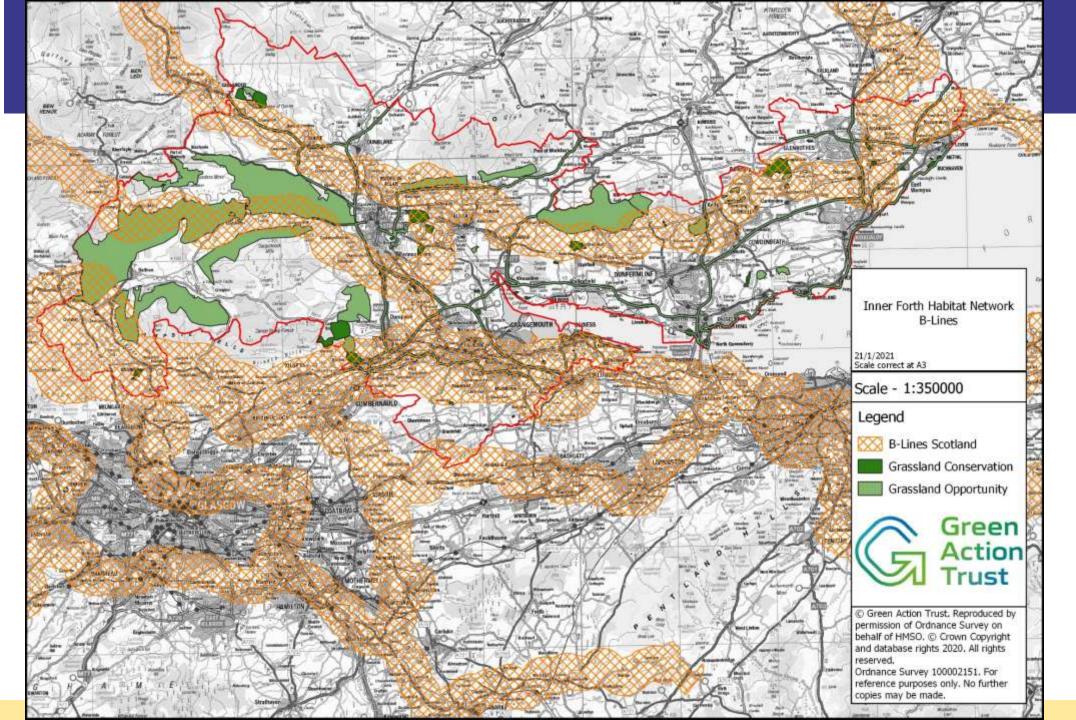


<u>B-Lines: How insect pathways can ensure the survival of bees and pollinating insects -</u> YouTube

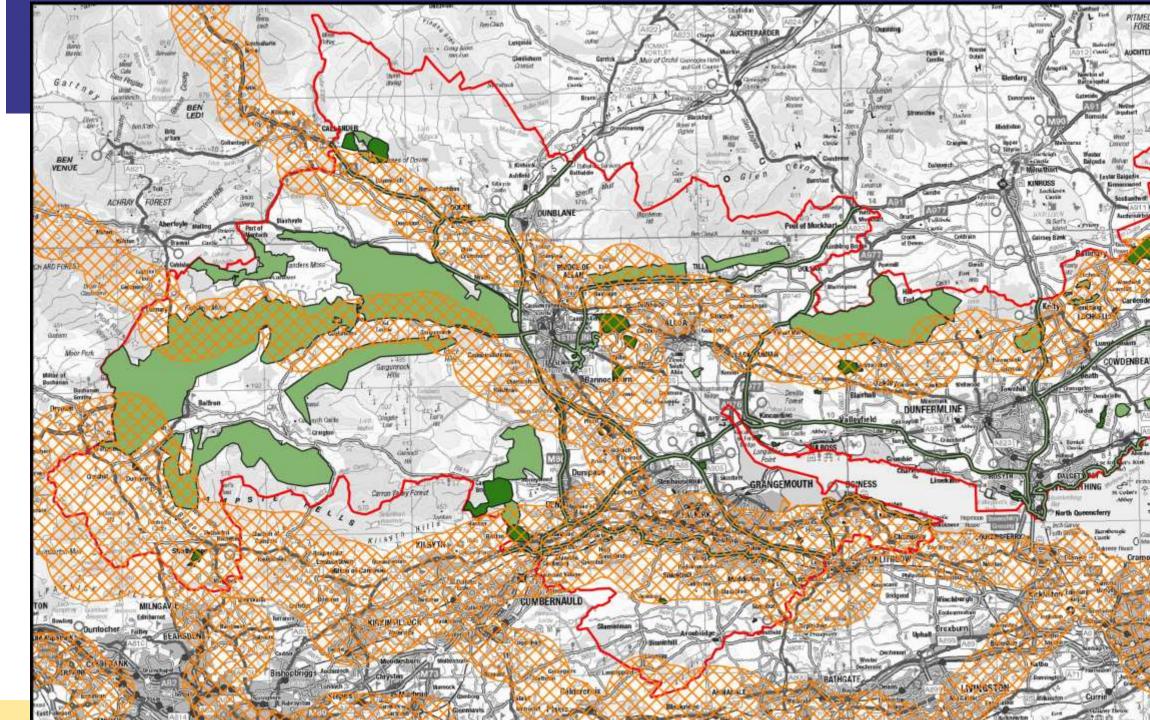










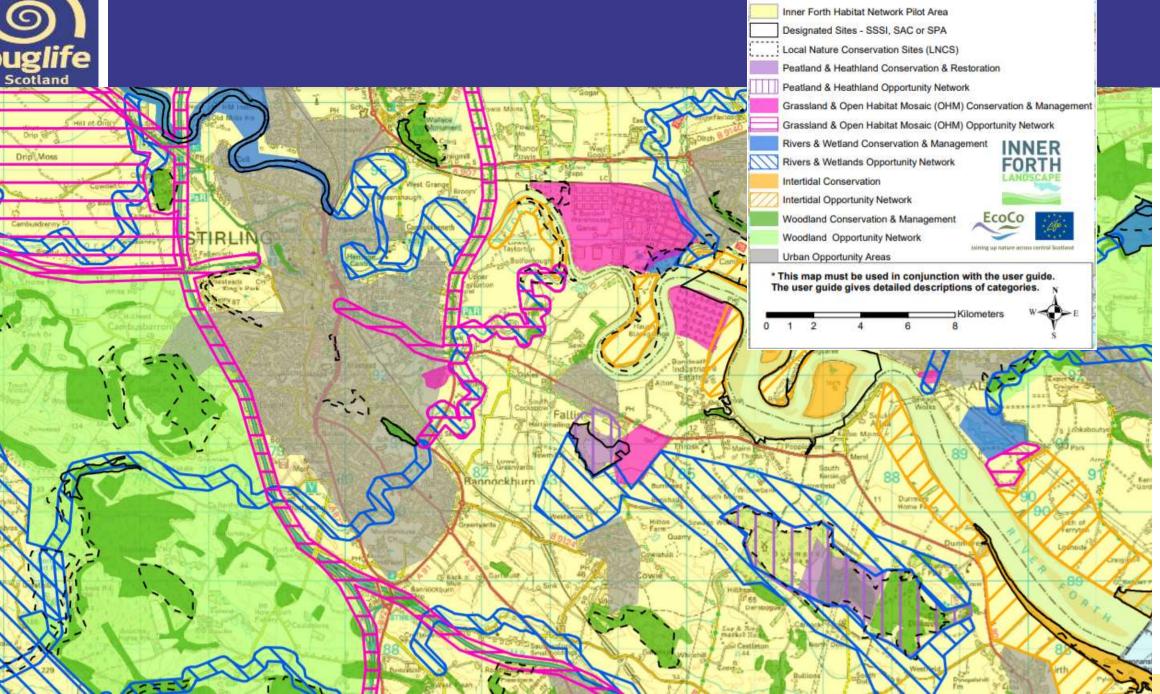




B-lines by their nature lend themselves to creating nature networks







Legend



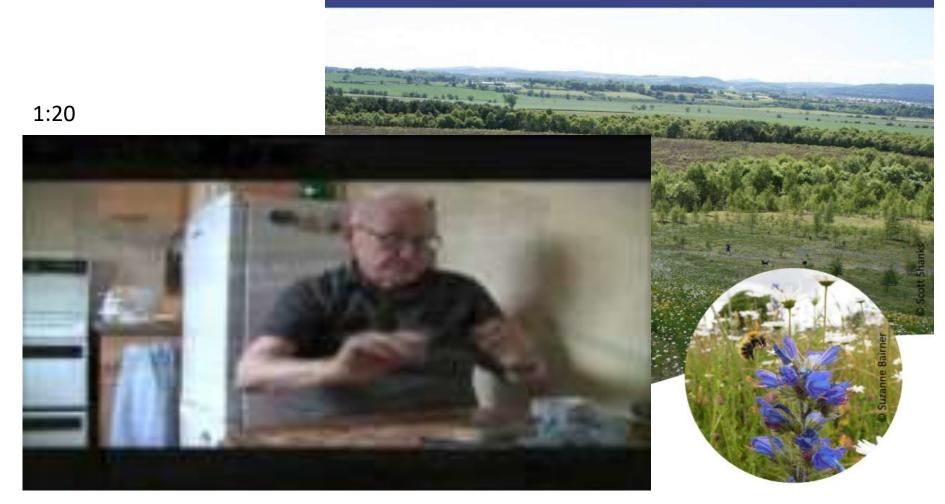
Precautionary principle – "The right habitat in the right place" (open mosaic habitat)

- NPF4 talks a lot about vacant & derelict land
- There are nuances when interpreting the guidance
- Functioning nature networks are more than trees and urban greening – IFHN highlights that
- Need to think Open Mosaic Habitat Survey on brownfield sites





Fallin Bing - From Coalfield to Brownfield!





Brownfields can be havens for wildlife, supporting some of the UK's most threatened species, while often being the last 'wild space' in urban areas for local communities.

The value of brownfields is slowly being recognised with two of the top five most biodiverse sites in the UK being brownfields. However, despite a greater understanding of the important of brownfields, they continue to be prioritised for development threatening the future of some of our most special wildlife.

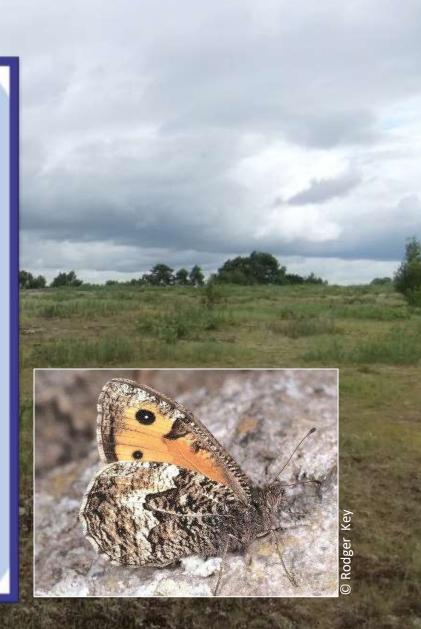




Examples of UK Priority invertebrates strongly associated with brownfields

- Dingy skipper (Erynnis tages
- Grayling (Hipparchia semele)
- Shrill carder bee (Bombus sylvarum)
- Brown-banded carder bee (Bombus humilis)
- Distinguished jumping spider (Sitticus distinguendus)
- Five-banded weevil wasp (Cerceris quinquefasciata)
- Four-banded weevil wasp (Cerceris quadricincta)

- Saltmarsh shortspur beetle (Anisodactylus poeciloides)
- Streaked bombardier beetle (Brachinus sclopeta)
- Phoenix fly (Dorycera graminum)
- Black-headed mason wasp (Odynerus melanocephalus)
- Horehound longhorn moth (Nemophora fasciella)
- Horrid ground weaver spider (Nothophantes horridus)





-) C buglife.org.uk/resources/habitat-hub/brownfield-hub/brownfield-conference-2013/

Brownfield Management Guidance

Guidance



Introduction to Brownfields



Identifying Open mosaic Habitat



Survey Handbook



Managing Brownfields for Butterflies



Managing Brownfields for Flies

Brownfield Hub All of a Buzz in the Thames Gateway Bing's for Wildlife Bridgeness Biodiversity Brownfield Case Studies Brownfield Guidance Brownfields sites under threat Canvey Wick Falkirk Stepping Stones Fallin Bing 'From Coalfield to Brownfield' View more

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RESOURCES Resources Ancient Tree Hub Farming Hub Habitat Hub Important Invertebrate Areas

Invasive Species Hub Planning Hub

https://www.buglife.org.uk/resources/habitat-hub/brownfield-hub/

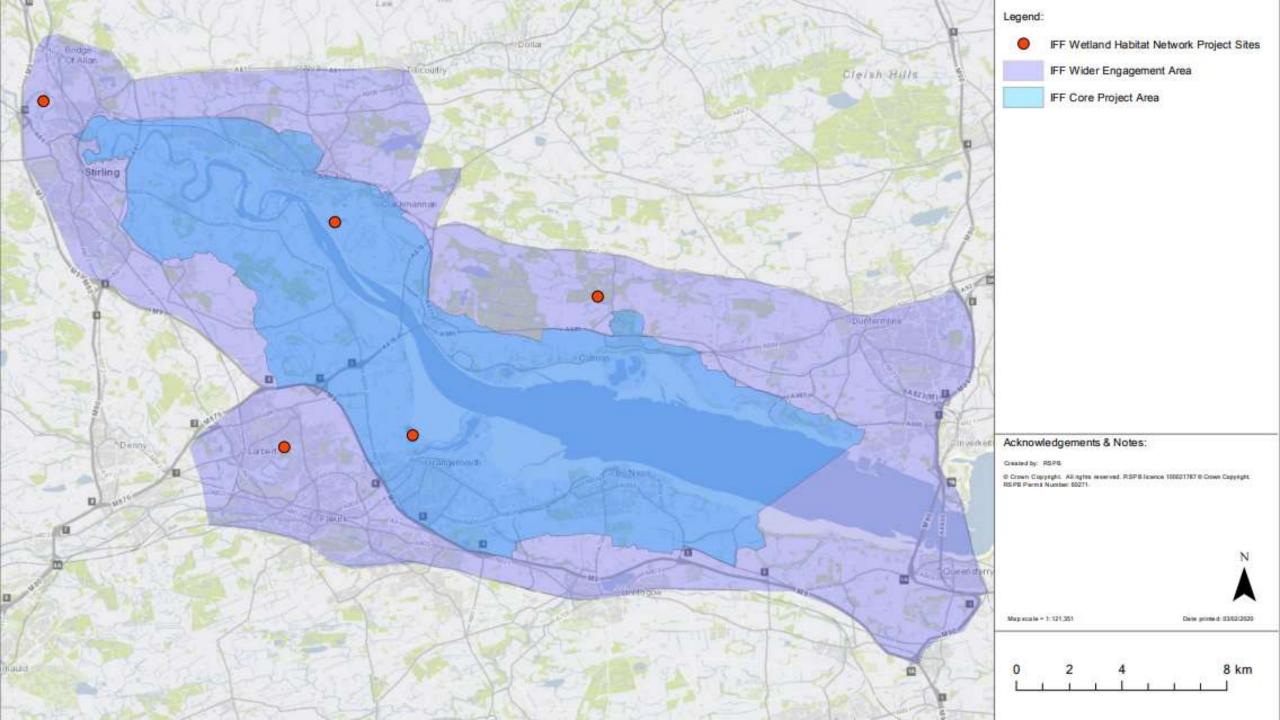


Thank you



Habitat Network In Action!

Toby Wilson, Senior Conservation Officer, RSPB Scotland





Kildean New ponds Woodland and hedgerow planting Meadow creation

Acknowledgements & Notes:

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Q&A Session



Kate Fuller – Inner Forth Futures

Emilie Wadsworth – Green Action Trust

Anna Perks – Falkirk Council

Natalie Stevenson – Buglife Scotland

Toby Wilson – RSPB Scotland

What Next?



Find out more:

www.innerforthlandscape.co.uk/about/habitat-network-project

www.facebook.com/innerforthlandscape

🥑 <u>@innerforth</u>

Use the maps and tools

Promote the use of habitat networks

Contact us – <u>kate.fuller@rspb.org.uk</u> or <u>zoe.clelland@rspb.org.uk</u>

